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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/011,027	11/02/2001	Laurent Scallie	AC-001-US	7510

31955 7590 06/29/2007

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EXAMINER	
JONES, SCOTT E	

ART UNIT	PAPER NUMBER
3714	

MAIL DATE	DELIVERY MODE
06/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/011,027	SCALLIE ET AL.	
	Examiner	Art Unit	
	Scott E. Jones	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 8-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 8-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This office action is in response to the amendment filed on April 30, 2007 in which applicant amends claims 1 and 15, and cancels claims 7, 19, and 20, and responds to the claim rejections. Claims 1-5 and 8-18 are pending. The Examiner notes that Applicant's remarks state claims 1-5 and 7-20 are currently pending; however, claims 7, 19 and 20 have been cancelled.

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 11, and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Bar-Nahum (U.S. 6,496,183).

Bar-Nahum discloses a method and apparatus for generating stereoscopic 3D graphics using a stereoscopic filter. The stereoscopic filter is a software module integrated in the operating system of a computer system and is configured to intercept function calls to a 3D hardware acceleration driver. The filter generates left eye and right eye viewpoint data for a graphics object and outputs the data to a display driver for storage in a frame buffer. The stereoscopic display is designed to create a realistic stereoscopic effect in the viewer's mind, given that the two frames are correctly displaced to match the distance between the eyes. The stereoscopic filter can be used with any stereoscopic display device since the RGB video signal output from the DAC is generated to meet industry standards. The stereoscopic filter is not limited to use with any particular operating system. Bar-Nahum's stereoscopic filter may be used to render images in a video game. Bar-Nahum additionally discloses a method for

operating three-dimensional application software to generate a 3D stereoscopic vision display, wherein the 3D application software is of the type that provides a 3D output signal to a display driver for a 3D graphics rendering device to generate a display output appearing to be three-dimensional for display on a two-dimensional (2D) screen display, further comprising:

Regarding Claim 1:

- running the application software in its normal mode to generate the 3D output signal which is normally sent from the application software to a display driver for a 3D graphics rendering device for generating a 3D display output on a 2D screen display (Figure 1, Column 4, lines 1-9, 19-29);
- intercepting the 3D output signal from the application software and redirecting said 3D output signal to a pseudo driver (stereoscopic filter (26)), wherein said pseudo driver generates from said output signal a left image view signal and a right image view signal that is stereoscopically offset from the left image view signal (Figures 2-5c, Column 3, lines 16-24, Column 4, lines 1-34, Column 6, lines 8-34, and Column 7, lines 27-67); and
- said pseudo driver (stereoscopic filter (26)) providing said left image view signal to a first 3D graphics rendering device and said right image view signal to a second 3D graphics rendering device, and using said first and second 3D graphics rendering device for separately rendering in tandem left and right image views for display in a 3D stereoscopic vision display device (Figures 2-5c, Column 3, lines 16-24, Column 4, lines 1-34, Column 6, lines 8-34, and Column 7, lines 27-67); and

- wherein the pseudo driver generates a 3D stereoscopic vision display using one physical graphics card with dual graphics generator card heads for separately rendering right and left image view for the 3D stereoscopic vision display (Figures 2-5c, and Column 8, lines 12-14).

Regarding Claim 2:

- wherein the 3D stereoscopic vision display device (34) is selected from the group consisting of head-mounted "stereo vision" goggles, head-mounted 3D display device, and a stereo vision monitor (Figures 2-5c, Column 3, lines 16-24, Column 4, lines 1-34, Column 6, lines 8-34, Column 7, lines 27-67, and Column 8, lines 1-4).

Regarding Claim 3:

- wherein the 3D application software is a 3D video game software which provides 3D game data output (Column 1, lines 23-31 and Column 9, lines 15-27).

Regarding Claim 4:

- wherein the intercepting and redirecting of the 3D game data is obtained by providing a wrapper for the game software's native API display driver and replacing with stereoscopic pseudo driver display function calls linked under the same name as the game software's native API for a 2D display (Figure 2, Column 3, lines 35-67, and Column 4, lines 1-11).

Regarding Claim 5:

- wherein the wrapper (integral to stereoscopic filter (26)) supports a selected one of the following group of native API formats: Glide; OpenGL; and DirectX (Column 8, lines 41-50).

Regarding Claim 11:

- wherein the dual rendering system is kept running while switching between different game software. Bar-Nahum inherently has contains this feature as the structure is provided. Given Bar-Nahum's apparatus is coupled to a game machine and a CD-Rom is retrieved from the drive, a game is shutdown and another selected on a PC, or a player selects another online game over the Internet, Bar-Hahum's dual rendering system must continue running (which could simply mean the dual rendering system remains powered up) when switching between games.

Regarding Claim 15:

- running the application software on a computer in its normal mode to generate a 3D output signal intended for a 2D screen display (Figure 1, Column 4, lines 1-9, 19-29);
- providing a pseudo 3D display driver that links to the native API display driver by intercepting image display function calls to the native API display driver from the application software and redirecting them through the pseudo 3D display driver in order to generate multiple, separate image views and provide the image views to respective ones of a corresponding multiple 3D graphics rendering devices for a multi-view 3D display (Figures 2-5c, Column 3, lines 16-24, Column 4, lines 1-34, Column 6, lines 8-34, and Column 7, lines 27-67); and
- wherein the pseudo 3D display driver generates right and left eye image views using separate graphics generator cards for rendering the right and left eye image views to respective right and left graphics rendering devices in parallel for converting the right and left eye views into right and left image display outputs, respectively, which

are used for a 3D stereoscopic vision display (Figures 2-5c, Column 3, lines 16-24, Column 4, lines 1-34, Column 6, lines 8-34, and Column 7, lines 27-67).

Regarding Claim 16:

- wherein the 3D multi-view display is selected from the group consisting of head-mounted "stereo vision" goggles, head-mounted 3D display device, and a stereo vision monitor (Figures 2-5c, Column 3, lines 16-24, Column 4, lines 1-34, Column 6, lines 8-34, Column 7, lines 27-67, and Column 8, lines 1-4).

Regarding Claim 17:

- wherein the 3D application software is a 3D video game software which provides 3D game data output (Column 1, lines 23-31 and Column 9, lines 15-27).

Regarding Claim 18:

- wherein the pseudo 3D display driver supports a selected one of the following group of native API formats: Glide; OpenGL; and DirectX (Column 8, lines 41-50).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 8-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bar-Nahum (U.S. 6,496,183).

Bar-Nahum discloses that as discussed above with regards to claims 1-5, 7, 11, and 15-20. However, Bar-Nahum seems to lack explicitly disclosing:

Regarding Claim 8:

- wherein the intercepted 3D game data is stored in a 3D data recorder for later play back.

Regarding Claim 9:

- wherein the recorded 3D game data are transmitted or downloaded through an online interface to a remote user.

Regarding Claim 10:

- wherein the intercepted 3D game data is combined with other 3D content using a mixer and a dual rendering system.

Regarding Claim 12:

- wherein another pseudo driver operates on the 3D game data in tandem with the pseudo 3D display driver.

Regarding Claim 13:

- wherein the other pseudo driver is a stereo sound or a directional force feedback driver.

Regarding Claim 14:

- wherein the video game software is run with one or more tracking devices for input from the player.

However, each of the limitations in claims 8-10 and 12-14 were notoriously well known to one having ordinary skill in the art at the time of Applicant's invention. Each of the claims is directed to features that make a player's gaming experience better than that of a standard game machine setup.

Response to Arguments

5. Applicant's arguments filed April 30, 2007 have been fully considered but they are not persuasive.

6. Applicant alleges Bar-Nahum neither teaches nor suggests using the hardware configurations previously claimed in claims 7 and 20 and now recited in claims 1 and 15. The Examiner respectfully disagrees and is puzzled by Applicants remarks. In particular, the Examiner cited Bar-Nahum figures 2-5c and column 8, lines 12-14 which clearly disclose hardware configurations. In figure 2, the Examiner notes Hardware (50) includes a stereoscopic display 3rd party hardware (34). Figure 3 discloses an "output to rgb sigs to stereoscopic display (72). Figures 4a-c and 5a-c disclose various stereoscopic modes that can be used with the invention. Moreover, column 8, lines 12-14 states, "...the stereoscopic filter (26) can be **used with any stereoscopic display device** since the RGB video signal output from DAC (32) is generated to meet industry standards." Thus, hardware configurations are clearly disclosed in Bar-Nahum. Consequently, the Examiner maintains the claims are anticipated or rendered obvious by Bar-Nahum (U.S. 6,496,183).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott E. Jones whose telephone number is (571) 272-4438. The examiner can normally be reached on Monday - Friday, 8:30 A.M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott E. Jones/
Primary Examiner, Art Unit 3714

SEJ